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CITY OF NEWTON, MASSACHUSETTS

Department of Planning and Development

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Public Hearing Date: September 12, 2006
Land Use Action Date: November 14, 2006
Board of Aldermen Action Date: November 20, 2006
90-Day Expiration Date: December 10, 2006

TO: Board of Aldermen

FROM: Michael Kruse, Director of Planning and Development
Nancy Radze h, Chief Planner
Robert Merryman, Senior Planner

DATE: September 8, 2006

SUBJECT: Petition #282-06 of TERRA SEARCH, LLC FOR SPRINT SPECTRUM, LP, d/b/a SPRINT NEXTEL / HAMMOND TRUST for SPECIAL PERMIT / SITE PLAN APPROVAL for installation of 12 façade mounted wireless antennas, 2 GPS antennas and associated equipment located at 20 Hammond Pond Parkway, Chestnut Hill, MA, Ward 7 Section 82, Block 2, Lot 21 containing 175,950 sq. ft of land in a Multi-Residence 3 District.

CC: Mayor David B. Cohen

The purpose of this memorandum is to provide the Board of Aldermen and the public with technical information and planning analysis which may be useful in the special permit decision making process of the Board of Aldermen. The Planning Department's intention is to provide a balanced view of the issues with the information it has at the time of the public hearing. There may be other information presented at or after the public hearing that the Land Use Committee of the Board of Aldermen will want to consider in its discussion at a subsequent Working Session.

EXECUTIVE SUMMARY

The petitioner is seeking a special permit to install twelve (12) wireless telecommunication antennas, two (2) GPS antennas, and two (2) HVAC condenser units on the roof of an existing 7-story multi-family dwelling. All other related ancillary equipment will be located in the basement.

I. ELEMENTS OF THE PETITION

Sprint Spectrum LP is seeking a special permit to allow for the installation of 12 telecommunications panel antennas, 2 GPS antennas and 2 HVAC condenser units on the roof of an existing 7-story multi-family dwelling, known as "The Embassy House" and owned by Hammond Park at Chestnut Hill Condominium Trust. The proposed antennas would be façade mounted on the penthouse and painted to match the existing penthouse facade. In addition to the antennas, the plans also depict two (2) HVAC condensers on the roof, which will be a minimum of 18 ft. from the nearest roof edge and will be located behind the existing penthouse. Unfortunately, the basement and the rear parking lot are not available for use as condenser sites.

The submitted plans show that the cable connection would run inside the penthouse and down an abandoned trash chute to the basement where the associated ancillary equipment will be located.

II. ZONING RELIEF SOUGHT

Based on the Chief Zoning Code Official's written zoning review (SEE ATTACHMENT "A"), the petitioner is seeking approvals through or relief from the following sections of the City's Zoning Ordinance:

- > *Section 30-18A (e)(6) -- allows the Board of Aldermen to grant a special permit for building mounted wireless communication equipment on multi-family structures in a Multi Residence 3 District not otherwise allowed as-of-right;*
- > *Section 30-18A (e)(10) -- allows the Board of Aldermen to grant a special permit for HVAC condensers on the roof on multi-family structures in a Multi Residence 3 District not otherwise allowed as-of-right;*
- > *Section 30-24 allows the Board of Aldermen to grant a special permit for building mounted wireless communication equipment when Section 30-18A (a)&(c) have been satisfied; and*
- > *Section 30-23 allows the Board of Aldermen to grant Site Plan Approval.*

III. SIGNIFICANT ISSUES FOR CONSIDERATION

In reviewing the petition, the Board of Aldermen should consider:

- > *Whether this is an appropriate location for a wireless installation; and*
- > *Whether the 12 antennas, 2 GPS antennas, and the 2 HVAC condensers have been sited, screened and painted to blend in with the existing structure in order to minimize the visibility of the devices and reduce the visual impacts on the surrounding neighborhood.*

IV. CHARACTERISTICS OF THE SITE AND NEIGHBORHOOD

A. Site

The 175,950 sq. subject property is located on the west side of Hammond Pond Parkway, just south of Route 9, in Chestnut Hill. The site is improved with a 7-story condominium building, which was built in 1948. The existing penthouse is 16.25 ft. high and is setback 33.5 ft. from the front and 18 to 21 feet from the sides of the building.

B. Neighborhood

The site is abutted to the north and south by multi-family dwellings — "The Gardens" and "The Hammond House," all under the same ownership as the subject property. The new Avalon at Chestnut Hill (apartments) abuts the site to the west, and to the east across Hammond Pond Parkway are several condominium buildings.

The subject site is within a Multi-Residence 3 Zoning District. The property to the west (AvalonBay) is within a Business 1 and Multi-Residence 3 District and across Hammond Pond Parkway are the "Hammond Gardens Condominiums within a Multi-Residence 1 District. The properties to the south beyond the subject property (Hammond Park at Chestnut Hill Condominium Trust) are within the Town of Brookline.

V. ANALYSIS**A. Site Plan Approval — Section 30-23**

Although the petitioner is required to seek Site Plan Approval as part of their request for special permit, this petition includes no actual changes to the site, as all the equipment is either roof-mounted or located within the basement of the structure.

Per Section 30-18A(0, *Special Permit Procedure*, "...whenever an application for a special permit is required for wireless communication equipment, site plan approval in accordance with the provisions of section 30-23, except section 30-23(c)(2),¹ shall be required..." In lieu of using the Site Plan Approval Criteria, the Board should consider use of the following design and operating criteria set forth in Section 30-18A(c) (SEE SECTION V.B. BELOW).

B. Design and Operating Criteria — Section 30-18A(c)

The petitioner is proposing to attach the 12 antennas and two (2) GPS antennas to the facade of the existing penthouse, below the roof plate, to eliminate silhouetting and to paint the antennas to match the penthouse facade. The petitioner has submitted examples of Decibel Base station Antennas, and stated that the proposed antenna dimensions will be 54" x 6" x 4" and GPS dimensions 5" tall with a 4" diameter. The GPS antennas are located in 6" inward facing corner on the back side of the penthouse and will not be visible from all sides.

In addition to the antennas, the petitioner is also proposing to mount two (2) HVAC condenser units on the roof, behind the penthouse. Each condenser unit would be 30 inches wide and 31 inches tall and do not appear to be visible from any abutting location. These condenser units would be another 20 inches higher if the spring rails are installed to dampen noise within the building itself. Even with rails on the condensers, they should not be visible from the public way.

¹Section 30-23(c)(2) defines the criteria that the Board shall use to consider an application for Site Plan Approval.

The submitted plans depict that the cable connection would enter the penthouse and run inside an abandoned trash chute down to the existing basement storage room to connect to the other ancillary equipment.

The criteria for wireless communications equipment are specifically designed to address issues relating to special permit for a façade mounted antenna installation, and cover the location of antennas and ancillary equipment, as well as screening and camouflaging. The following table shows how this proposed installation compares with the Design and Operating Criteria established in Section 30-18A(c) of the Zoning Ordinance:

REQUIREMENT	COMPLIES		
	YES	No	N/A
1. A statement from a radio frequency engineer or other qualified engineer certifying that the standards of the 1996 Telecommunications Act have been met.	X		
2. The equipment must at all times be maintained in good and safe condition and comply with all applicable FCC standards and shall be removed within thirty (30) days of the date when all use of such equipment ceases. This applies to all wireless communication equipment and structures, including any existing equipment and structures	X		
3. The equipment should be sited, screened, painted or otherwise finished to blend in with the building or structure on which it is mounted in a manner that aesthetically minimizes the visibility of the equipment.	x		
4. Any fencing sued to control access to the equipment should be compatible with its surroundings.			N/A
5. Equipment boxes for building-mounted equipment should be either interior to the building on which it is located, completely camouflaged, and/or completely screened from view from the public way.			
6. All freestanding wireless communication equipment should meet any setback requirements for the district in which it is located and should be screened from the public way.			N/A
7. No part of building-mounted wireless equipment shall be located over a public way.			N/A
8. Construction of the equipment should avoid major topographic changes and minimize the removal of trees and soil.			N/A
9. Installation of wireless communication equipment shall avoid the removal or disruption of historic resources on and off-site.	X		
10. Wireless communication equipment shall not be illuminated, except as required by state and federal law.	X		
11. Equipment owned and operated by an amateur radio operator shall be constructed at the minimum height necessary to accommodate communications in order to minimum the aesthetic impact.			N/A
12. Wireless communication should be maintained and operated in accordance with the City of Newton "Noise Ordinance." Applicants shall use best efforts to minimize noise from any external noise producing equipment, and should provide a report from a qualified acoustical engineer or other appropriate professional certifying that the proposed equipment meets the requirements of the Noise Ordinance.	x		

As shown in the table above and as described in the preceding text, the proposed wireless installation will meet with all the relevant design criteria established in the ordinance.

C. Relevant Special Permit Criteria

1. The specific site is an appropriate location for such use/structure

Based on the information provided by the petitioner, the proposed installation is needed as a replacement for the antennas that were eliminated when AvalonBay demolished the former hotel on the abutting site. The petitioner has stated that there were no other options in the immediate neighborhood. The AvalonBay site is subject to a comprehensive permit issued, by the City's Zoning Board of Appeals. No commercial uses were authorized as part of that permit.

2. The use as developed and operated will not adversely affect the neighborhood

The proposed antennas will be located below the roof plate line and painted to match the existing penthouse. Because of the location of and the proposed painting of the antennas, along with the setback of the penthouse from the edges of the roof and height of the building, the antennas should not be noticeable and should not adversely affect the neighborhood.

With the exception of the two (2) roof-top HVAC condenser units, all wiring and related ancillary equipment will be located within the building and will not be visible to the public. Since the ancillary equipment will be located in the basement, there should be no noise impacts on the residents of this building because the equipment will be inside a new equipment room in the old incinerator room providing a double wall of sound proofing.

The two (2) HVAC condenser units will be located in the middle of the roof, and mostly hidden by the penthouse. Because there are no skylights or openings into the roof and because the units are setback 18 to 25 feet from the edge of the building roof, which is 58 feet from the ground and the proposed condensers are over 200 feet to the nearest abutter. The Planning Department does not believe that there will be any noise impacts from the units on the residents of this building or abutting residences.

Unlike the recent wireless proposals before the Alderman located on Commonwealth Avenue in Chestnut Hill, the subject property does not have any skylights or other openings in the building that would require sound dampening.

The petitioner has submitted a noise study that states that the condensers at the nearest sound receiver ("West Gardens") be at the 32 dBA level which is below the lowest background level of 37 dBA and even further below the City of Newton's 42 dBA requirement at this site. The petitioner has offered to install a vibration isolation rail system (Nova Type FRR-2 Spring Rail) after installation, if noise from the condensers exceed the City's Noise Control Ordinance. The Board may want this rail system in place with the original installation.

4. Access to the site over streets is appropriate for the types and numbers of vehicles involved

The petitioner estimates that only one trip per month will be necessary for the maintenance of the equipment. The Planning Department believes that a dedicated parking space on-site is not necessary given the limited frequency of vehicular trips related to the wireless equipment. The petitioner has stated that they would use a designated visitor parking space when visiting the site.

VI. SUMMARY

The petitioner is proposing to locate 12 antennas and two (2) GPS antennas on the sides of the penthouse of an existing 7-story multi-family dwelling. The proposed antennas will be located below the roof plate line and painted to match the existing penthouse. Because of the proposed location and painting of the antennas, along with the setback of the penthouse from the edges of the roof and height of the building, the Planning Department does not believe that the antennas will be noticeable from the public way.

In addition, the petitioner is seeking approval for two (2) roof mounted HVAC condenser units, which are needed to keep the equipment from over-heating. The condenser units will not be seen because of the height of the building compared to abutters, will be located behind the penthouse thus screened from properties along Hammond Pond Parkway, and will be 18 to 25 feet away from the edge of the roof. Thus the condensers should not adversely affect residents of this building or the neighborhood.

With the exception of the two (2) roof-top condenser units, all wiring and related ancillary equipment will be located within the basement of the building and will not be visible to the public. The ancillary equipment will be located inside a new equipment room to be constructed within the old incinerator room providing a double wall of sound proofing.

The cable connections from the antennas will run directly inside the penthouse and down the abandoned trash chute to the basement. The cables will not be visible from the public way and/or abutting neighbors.

Because the equipment will be well screened, painted, and/or setback from the edges of the roof, the proposed wireless installation should have minimal if any impacts on the residents of this building or the immediate neighborhood.

Zoning Review Memorandum

Proposed Wireless Communication Installation

Dt: July 10, 2006

To: Timothy W. Greene, representing Sprint Spectrum, L.P. do TerraSearch

Fr: Juris Alksnitis, Chief Zoning Code Official

Cc: Mike Kruse, Director of Planning and Development
John Lojek, Commissioner of Inspectional Services

Re: Proposed installation of wireless communication equipment on multi-family residential building in residential zone

Applicant: Sprint Spectrum, LP

Site: 20 Hammond Pd. Parkway

SBL: Section 82, Block 02, Lot 21A1

Zoning: MR-3

Lot Area: 175,950 sq. ft.

Use: Multi-unit apartment building

Type of Installation:

- ☐ Residential, per Section 30-18A(d)(1)*
- ☐ Amateur, per Section 30-18A(d)(2)
- ☐ Commercial interior-mounted, per Section 30-18A(d)(3)
- ☐ Commercial interior-mounted, located in residential districts, per Section 30-18A(d)(3)
- ☐ Commercial roof-mounted, located in residential districts, per Section 30-18A(e)(6)
- ☐ Commercial façade-mounted, per Section 30-18A(d)(5)
- ☐ Commercial interior-mounted, located in public use districts, per Section 30-18A(d)(6)
- ☐ Non-residential satellite earth station antennas, per Section 30-18A(d)(7)*

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The applicant has submitted a copy of the application to the Director of Planning and Development for Administrative Site Plan review, per Section 30-18A(g) for compliance with Section 30-18A(c).

Background:

The applicant states that no other wireless installation is present at the subject location. This site has been selected as a replacement locus for a prior nearby Sprint wireless installation now decommissioned due to the redevelopment of the property currently under construction by Avalon Bay at 160 Boylston St. In addition, the applicant will relocate and co-locate a Nextel

installation from its current location at 220 Boylston St. The applicant seeks to install wireless communication equipment on the mechanical room penthouse and roof at 20 Hammond Pond Parkway, The Embassy House as follows:

- Twelve panel antennae (3 Sprint; 9 Nextel) mounted on the east, south and west sides of existing upper mechanical room penthouse located in the forward area of the roof.
- Two GPS antennae mounted on the west side of existing upper mechanical room penthouse noted above.
- Two HVAC units located on the roof to the rear of the mechanical room penthouse.
- Equipment room located within the basement level to house radio equipment cabinets.

The applicant seeks approval pursuant to Section 30-18A(e)(6), *Wireless Communication Equipment Allowed by Special Permit* for a building-mounted (roof placement) installation and location on a multi-family structure within a residential zone wherein such wireless equipment is not allowed as of right.

Administrative determinations

1. Section 30-18A(e)(6) requires a special permit for roof-mounted wireless communication equipment on a multi-family structure within a residential zone. While the applicant indicates that property owners have approved the installation, a letter of assent or other document evidencing approval remains to be provided.
2. Certain ancillary equipment, i.e. two HVAC units, is proposed to be located on the roof and require a special permit per Section 30-18A(e)(10). However, the other ancillary equipment will be placed in an equipment room to be constructed on the basement level, and does not trigger this requirement.
3. The proposed 12 wall-mounted antennae panels and 2 GPS wall-mounted antennae will not extend vertically beyond the roof of the existing upper mechanical room penthouse. It is noted that the existing nonconforming height of the subject building is 57.67 ft. at the roof line (exceeding current 30 ft. building height limit) and 74 ft at the upper penthouse roof line (exceeding the 15 ft. roof mechanical enclosure height limit). However, the proposed wireless installation will not further increase any nonconformities as to height.
4. As this installation is located within an MR-3 zone, it is not subject to controls set out in Section 30-18A(d)(4) pertaining to installations located within a commercial zone. For illustrative purposes only, a comparison with the provisions of (d)(4) applicable to a commercial building above 36ft. in height indicates that the proposed roof-mounted components would meet the edge-of-roof setbacks while the top of the proposed panel antennae will be located at 15 ft. above the roof, and would exceed the above-roof antenna height of 12 ft.
5. The subject installation involves both "building-mounted" and "façade-mounted" components. As a result, Section 30-18A(e)(3) applies, which references the provisions of Section 30-18A(d)(5) pertaining to façade-mounted equipment.
6. The submitted plans and information comply with the Newton Zoning Ordinance unless otherwise noted below per the table titled "Summary - Wireless Installation Criteria".

7. See table "Zoning Relief Summary" below.

Summary - Wireless Installation Criteria		
Ordinance		Complies
	Residential Installation	
30-18A(d)(1)	N/A	N/A
	Amateur	
30-18A(d)(2)	N/A	N/A
	Commercial	
30-18A(d)(3)-(5)	Located in Business, Manufacturing, or Mixed Use zone	N/A
30-18A(e)(3) 30-18A(d)(5)	Complies with requirements that façade mounted antennae do not extend above the face of any wall, extend not more than 18" from the face of the building and do not obscure any window or architectural feature.	Yes
Design	and Operating	
30-18A(c)(1)	Applicant has submitted a report from a qualified professional indicating compliance with Federal and Mass. laws and regulations pertaining to radio frequency emissions and related requirements.	Yes
30-18A(c)(1)	Applicant has submitted a copy of the applicable FCC licenses.	Yes
30-18A(c)(2)	Applicant agrees to maintain equipment in good and safe condition and comply with all applicable FCC standards.	Yes
30-18A(c)(3)	Proposed installation is suitably screened and camouflaged.	Yes
30-18A(c)(4)	Fencing controlling access to installation is compatible with neighborhood.	N/A
30-18A(c)(5)	Equipment boxes must be located in interior of building, be completely camouflaged, or completely screened from view from the public way.	Yes
30-18A(c)(6)	Freestanding wireless installation must meet setback requirements; shall be screened from the public way; shall be located in the rear yard of the subject lot.	N/A
30-18A(c)(7)	No part of any building-mounted installation shall be located over a public way.	N/A
30-18A(c)(8)	Installation avoids major topographic changes; minimizes removal of trees and soil in a manner compatible with appearance of neighborhood.	N/A
30-18A(c)(9)	Installation avoids removal or disruption of historic resources on and off site.	Yes
30-18A(c)(10)	Illumination complies. (Installation will not be illuminated.)	Yes
30-18A(c)(11)	Complies with requirements pertaining to amateur radio operations.	N/A
30-18A(c)(12)	Applicant has submitted a report from a qualified acoustical engineer indicating installation complies with City of Newton Noise Ordinance.	Yes

Zoning Relief Summary		
Ordinance	Communication	Action Req
30-18A(e)(6)	Approval of multiple roof-mounted antennae (12 panels affixed to walls of upper mechanical room penthouse) painted to match penthouse on a multi-family residential building in the MR-3 zone.	
30-18A(e)(6)	Approval of 2 roof-mounted GPS antenna affixed to wall of upper mechanical room penthouse painted to match penthouse on a multi-family residential building in the MR-3 zone.	
30-18A(e)(6)	Approval of roof-mounted cable trays and related ancillary equipment on a multi-family residential building in the MR-3 zone.	N/A
30-18A(e)(10)	Approval of ancillary equipment, i.e. 2 HVAC units to be located on the roof.	
	Extension of Non-conforming Structure	
30-21(b); 30-15 Table 1	Not applicable	N/A
	Site	
30-23	Approval of site plan	
	Special Perm	
30-24(d)	Approval of special permit.	
	Zoning card of Appeals	
	Not applicable.	N/A

Plans & materials reviewed:

- Information packet prepared by Timothy Greene, TerraSearch.
- Radio frequency emissions report, April 7, 2006, by Donald L. Hayes, Jr.
- Environmental Sound Levels Evaluation, March 16, 2006, by Cavanaugh Tocci Assoc. Inc.

- Plan set titled "Embassy House, 20 Hammond Pond Parkway, Newton, MA 02467", last revised 6/02/06, prepared by TerraSearch Design Group, 270 Centre St., Holbrook, MA 02343, with Sheets Z-1 and Z-2 'stamped and signed by Kenneth Dennison, Registered Professional Engineer, consisting of the following:
 - > Sheet T-1, Title Sheet
 - > Sheet Z-1, Site Plan, Roof Plan, Basement Level Plan
 - > Sheet Z-2, General Notes, North Elevation, Antenna Specifications